

Work Order ID 48411

June 26, 2009 12:42:44 PM



Page 1

Item ID: D3511-041 **BK**

Accept



Setup Start



Revision ID: A

Stop



Item Name: Wearplate Assembly

Start Date: 15/07/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 03/08/2009 Req'd Qty: 4.00



Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3511

Rev A

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3511 11 Dwg Rev: _____ 12-
Deburr if necessary 11 Identify as D3511-1

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

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Page 2

Item ID: D3511-041
Revision ID: A
Item Name: Wearplate Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00
Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:
Customer:

Reference:

Approvals: Process Plan:
QC:

Date:
Date:

Tooling:
SPC (Y/N):

Date:
Date:

Run Start
Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	Small Fab	0.00							
Small Fab	Memo	0.00							
Small Fab	Bend fwd 90 deg. bend per dwg D3511								
140 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
150 	Large Fab	0.00							
Large Fab	Memo	0.00							
Large Fab	Weld as per Dwg D3511 A/R SS ROD Batch: 1108775								

88 07/07/08 07/06/24 (4)

=> 5 07/06/24 (49)

88 09.07.06 (4X)

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Item ID: D3511-041
Revision ID: A
Item Name: Wearplate Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00



Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:

Customer:

Reference:

Run Start



Stop



Approvals: Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160



Small Fab

Small Fab

Memo

0.00

0.00

Small Fab

Form as per Dwg D3511

88 09/106/08

④

170



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

0.00

1607.08.08 ④

180



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

⇒ 802071000 ④

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Page 4

Item ID: D3511-041
Revision ID: A
Item Name: Wearplate Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00
Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:
Customer:

Reference:

Approvals: Process Plan:
QC:

Date:
Date:

Tooling:
SPC (Y/N):

Date:
Date:

Run Start
Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190



Powdercoat

Powder Coating

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

Memo

0.00

START TIME:

9:30AM

HOVEN TEMPERATURE:

FINISH TIME:

320°F

M109091

09-07-09

(x4) JH

200



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

09-07-9

(4)

BR

210



Packaging

Packaging

Identify as per dwg & Stock Location:

ST

496

0.00

Memo

0.00

PC 8/7/7 (4)

Work Order ID 48411

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Page 5

Item ID: D3511-041
Revision ID: A
Item Name: Wearplate Assembly

Accept



Setup Start



Stop



Start Date: 15/07/2009 Start Qty: 4.00
Required Date: 03/08/2009 Req'd Qty: 4.00



Cust Item ID:
Customer:

Reference:

Approvals: Process Plan:
QC:

Date:
Date:

Tooling:
SPC (Y/N):

Date:
Date:

Run Start
Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

220

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/07/09 *[Signature]*

W 09.07.09

Picklist Print

June 26, 2009 12:42:43 PM

Page 1

Work Order ID: 48411

Parent Item: D3511-041RevA

Parent Item Name: Wearplate Assembly

Start Date: 15/07/2009

Required Date: 03/08/2009

Comments:

Start Qty: 4.00

Required Qty: 4.00

[illegible]

Date: Monday, 08/06/2009 1:11:58 PM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WEARPLATE
Job Number : 48411	
Estimate Number : 12403	
P.O. Number :	Part Number : D3511041
This Issue : 08/06/2009 S.O. No. :	Drawing Number : D3511 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : / / Type : SMALL /MED FAB	Drawing Revision : A
Previous Run : 47862	Material :
Written By :	Due Date : 15/06/2009 Qty: 4 Um: Each
Checked & Approved By : <u>JUD 09.06.08</u>	
Comment : Est Rev:A New Issue 06-05-04 JLM	
Est Rev:B New process 06-05-05 EC	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
----------------	------------------------------	----------------------

1.0	M304S188	304 SHEET 0.188
-----	----------	-----------------



Comment: Qty.: 1.5572 sf(s)/Unit Total : 6.2286 sf(s)
 304 SHEET .188" THICK
 (M304S0188)
 Batch: 107676 1B 9-6-17

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET
 1-Cut as per Dwg D3511
 Dwg Rev: A 1B 9-6-17
 Prog Rev: A
 2-Deburr if necessary 1B 9-6-17
 Identify as D3511-1

4

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

5 09/06/18 RY

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 08/06/2009 1:11:58 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 48411

Part Number: D3511041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D35031

Cup



Comment: Qty.: 8.0000 Each(s)/Unit Total : 32.0000 Each(s)

CUP

Batch: B47971

SP 09.07.02

6.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Bend fwd 90 deg. bend per dwg D3511

SB 09/06/24 (4)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SP 09/06/24 (4)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld as per Dwg D3511

A/R SS ROD Batch: M108775

SP 09.07.06 (4X)

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Form as per Dwg D3511

SB 09/07/08 (4)

10.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

SP 09.07.08

11.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SP 09/07/08 (4)

12.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Black Sandtex (Ref: 4.3.5.7) as per QSI 005 4.3

START TIME: 9:50AM

SP 09-07-09 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 08/06/2009 1:11:58 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 48411

Part Number: D3511041

Job Number:



Seq. #:

Machine Or Operation:

Description :

OVEN TEMPERATURE: 320°F
FINISH TIME: 10:20 AM

ell 09-07-09 *24*

13.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BP 09-07-09 *(H)*

14.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

15.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



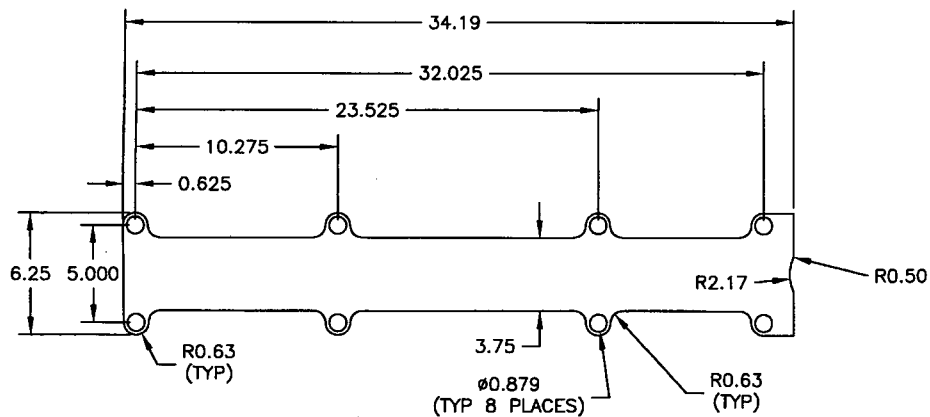
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

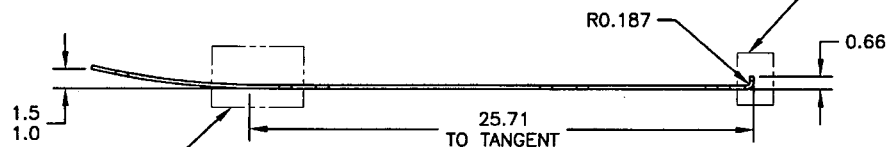
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



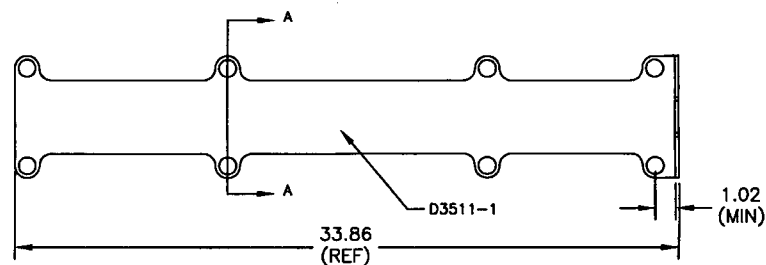
D3511-1F FLAT PATTERN

NOTE: BEND BEFORE WELDING



D3511-1 BEND DETAIL

NOTE: BEND AFTER WELDING



SECTION A-A

D3511-041 WELD DETAIL

D3511-041 WEARPLATE ASSEMBLY

- 1) MAKE D3511-1F WEARPLATE FROM: AISI 304/316 STAINLESS STEEL (0.188 THICK)
(REF DART MATERIAL SPEC. M304S7GA)
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT ASSEMBLY BLACK SANDTEX (REF. 4.3.5.7) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.015

RELEASED

06 04 25

D3511-041 WEARPLATE ASSEMBLY PARTS LIST

QTY -041	PART NUMBER	DESCRIPTION
X	D3511-041	WEARPLATE ASSEMBLY
1	D3511-1	WEARPLATE
8	D3503-1	CUP

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A	06.04.04	NEW ISSUE
DESIGN PH	DRAWN BY PH	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED J. J. H.	APPROVED	DRAWING NO. D3511
DATE 06.04.04		TITLE WEARPLATE
		REV. A SHEET 1 OF 1 SCALE NTS

WORK ORDER
WITHOUT NOTICE
TO AMENDMENT
ROLLED COPY
TO
FOR COPY
TO
COPY